

September 4.—8 a. m., 64°; 1 p. m., 76°; 8 p. m., 67°. Fair, with fresh northwest winds.

September 5.—8 a. m., 69°; 1 p. m., 76°; 8 p. m., 71°. Generally fair, with fresh to light south winds.

September 6.—8 a. m., 67°; 3 p. m., 84°; 11 p. m., 71°. Fair and warmer; west winds.

September 7.—8 a. m., 70°; 2 p. m., 82°; 11 p. m., 69°. Partly cloudy; continued warm, with fresh east winds. Between 4 and 6 p. m. several light showers occurred in the Shenandoah Valley. The area of precipitation extended from a few miles to the north of the gap nearly to Riverton. There was practically no movement to the storm.

September 8.—8 a. m., 72°; 2 p. m., 81°; 11 p. m., 74°. Partly cloudy and warm; fresh east winds. Between 12 a. m. and 2 p. m. a general showery formation appeared to the west of here in the neighborhood of Newmarket Gap. The stormy formation disappeared without moving. Some little rain fell.

September 9.—8 a. m., 74°; 2 p. m., 82°; 8 p. m., 70°. Partly cloudy, continued warm; light south to east winds. Between 2 and 3 p. m. a light shower, with but little thunder, formed in the neighborhood of the gap, and moved east by northeast, crossing the ridge to the north of here—the extreme southern edge passing over camp a little after 3 p. m.

September 10.—8 a. m., 71°; 2 p. m., 83°; 1 p. m., 68°. Fair in morning; partly cloudy, with showers in afternoon. Between 5 and 6 p. m. a few showers occurred in the Shenandoah Valley. From 7 to 10 p. m. a little rain fell in camp.

September 11.—8 a. m., 74°; 2 p. m., 86°; 11 p. m., 73°. Fair, with fresh south winds. During the night west winds increased, reaching gale force by morning.

September 12.—8 a. m., 72°; 2 p. m., 75°; 11 p. m., 64°. Fair, with west gales, diminishing in force during the day. On the morning of the 7th indications were first noticed of an approaching northeast storm. Unsettled weather continued until the night of the 11th. The west gale which came on during the night of the 11th broke the longest spell of hot weather on record for this place.

September 13.—8 a. m., 64°; 2 p. m., 77°; 8 p. m., 68°. Fair, with light winds, mostly easterly. There were indications of a coming storm at night.

September 14.—8 a. m., 65°; 2 p. m., 68°; 9 p. m., 62°. Generally cloudy, with northeast winds.

September 15.—8 a. m., 60°; 2 p. m., 62°; 9 p. m., 60°. Rain and fog, with northeast winds. The rain was quite heavy during the afternoon and evening. It stopped at midnight. High northeast winds prevailed during the morning, but diminished rapidly between 12 m. and 1 p. m., and were only fresh during the afternoon. They shifted to south then to southwest between 6 and 9 p. m.

September 16.—8 a. m., 62°; 2 p. m., 70°; 10 p. m., 58°. Fair, with brisk winds; westerly shifting to northwest winds, and increased during the night, with a cool wave.

September 17.—8 a. m., 48°; 2 p. m., 54°; 10 p. m., 48°. Fair, with brisk to high northwest winds.

September 18.—8 a. m., 44°; 2 p. m., 55°; 9 p. m., 50°. Fair, with brisk northwest winds diminishing.

September 19.—8 a. m., 40°; 2 p. m., 58°; 10 p. m., 50°. Fair, with light north shifting to southeast winds in the afternoon, and becoming brisk at night.

September 20.—8 a. m., 56°; 2 p. m., 64°; 10 p. m., 60°. Partly cloudy, with southwest becoming brisk southeast winds at night. A little rain fell during the night.

September 21.—8 a. m., 58°; 2 p. m., 65°; 10 p. m., 60°. Generally cloudy, with light winds becoming southeast at night.

September 22.—8 a. m., 58°; 2 p. m., 63°; 10 p. m., 58°. Partly cloudy, with southwest winds.

September 23.—8 a. m., 52°; 2 p. m., 60°; 9 p. m., 56°. Rain in morning, generally fair in afternoon, southwest winds.

September 24.—8 a. m., 54°; 2 p. m., 65°; 8 p. m., 58°. Fair, with light southwest winds.

September 25.—8 a. m., 58°; 2 p. m., 69°; 10 p. m., 60°. Fair; light southwest winds.

Light frost was noticed by others on the morning of the 19th.

OBSERVATIONS AT HONOLULU.

Through the kind cooperation of Mr. Curtis J. Lyons, Meteorologist to the Government Survey, the monthly report of meteorological conditions at Honolulu is now made partly in accordance with the new form, No. 1040, and the arrangement of the columns, therefore, differs from those previously published.

Meteorological observations at Honolulu, September, 1900.

The station is at 21° 18' N., 157° 50' W.
Hawaiian standard time is 10^h 30^m slow of Greenwich time. Honolulu local mean time is 10^h 31^m slow of Greenwich.
Pressure is corrected for temperature and reduced to sea level, and the gravity correction, —0.06, has been applied.
The average direction and force of the wind and the average cloudiness for the whole day are given unless they have varied more than usual, in which case the extremes are given. The scale of wind force is 0 to 12, or Beaufort scale. Two directions of wind, or values of wind force or amounts of cloudiness, connected by a dash, indicate change from one to the other.
The rainfall for twenty-four hours is measured at 9 a. m. local or 7:31 p. m., Greenwich time, on the respective dates.
The rain gage, 8 inches in diameter, is 1 foot above ground. Thermometer, 9 feet above ground. Ground is 43 feet, and the barometer 50 feet above sea level.

Date.	Pressure at sea level.	Temperature.		During twenty-four hours preceding 1 p. m. Greenwich time, or 2:30 a. m. Honolulu time.										Total rainfall at 9 a. m. local time.
				Temperature.		Means.		Wind.		Average cloudiness.	Sea-level pressures.			
		Dry bulb.	Wet bulb.	Maximum.	Minimum.	Dew-point.	Relative humidity.	Prevailing direction.	Force.		Maximum.	Minimum.		
1.....	29.93	76	70	86	73	67.7	68	ne.	2	2-5	29.97	29.90	0.11	
2.....	29.93	76	70.5	85	75	66.5	65	ne.	3	2	30.00	29.92	0.08	
3.....	29.95	77	70	86	76	67.7	67	ne.	4	3	30.01	29.94	0.04	
4.....	29.96	77	69.5	86	75	67.7	67	ne.	3-4	4	30.01	29.94	0.10	
5.....	29.92	75	70	85	74	67.3	66	ne.	4-1	4	30.00	29.91	0.02	
6.....	29.91	75	69	85	75	66.5	66	ne.	3-1	2	29.97	29.90	0.00	
7.....	29.93	76	68.5	86	75	66.0	64	ne.	3	3	29.98	29.89	0.00	
8.....	29.93	76	69.5	85	75	65.3	62	ne.	3	3	29.99	29.90	0.00	
9.....	29.92	73	69	86	75	66.3	66	ne.	3-0	2-8	29.98	29.91	0.00	
10.....	29.89	73	69	86	73	68.0	70	ne.	0-2	3-9	29.96	29.88	0.03	
11.....	29.91	71	68.5	87	72	67.5	70	ne.	0-2	2-0	29.94	29.86	0.00	
12.....	29.96	71	69	85	71	69.7	77	s-w.	1-0	3-8	29.99	29.90	0.00	
13.....	29.97	78	69	88	71	69.3	73	w-ne.	0-2	5	30.03	29.95	0.02	
14.....	29.98	76	69	87	77	65.5	61	nne.	3	5	30.03	29.97	0.03	
15.....	29.98	76	70	88	75	66.0	63	ne.	4	4	30.03	29.95	0.02	
16.....	29.99	76	68	86	76	66.0	64	ne.	4-2	2	30.05	29.95	0.00	
17.....	29.99	75	69	85	76	63.3	59	ene.	3	3-5	30.05	29.97	0.04	
18.....	29.98	78	69	85	75	65.5	64	ne.	3-4	5	30.04	29.96	0.04	
19.....	30.05	77	69	85	77	65.0	60	ne.	4-5	4	30.06	29.96	0.03	
20.....	30.00	77	69	86	76	65.7	64	ne.	4-2	4	30.08	29.99	0.08	
21.....	29.97	75	69.5	85	76	65.5	63	ne.	3	4	30.04	29.95	0.48	
22.....	29.94	76	68	83	70	66.3	66	ne.	2	5	30.01	29.92	0.15	
23.....	29.92	74	69	84	72	65.0	63	ne.	3	2	29.98	29.87	0.11	
24.....	29.89	75	70	84	72	67.7	71	ne.	3	4-2	29.97	29.85	0.06	
25.....	29.89	76	69.5	83	72	67.7	71	ene.	3	5	29.96	29.85	0.01	
26.....	29.92	76	70	85	75	67.3	68	ne.	3	3	29.97	29.86	0.01	
27.....	29.92	75	69.5	86	71	66.3	64	nne.	3	3	29.96	29.88	0.01	
28.....	29.91	70	68.5	85	75	68.3	74	ne.	2	6	29.97	29.90	0.12	
29.....	29.90	70	68.5	85	70	68.0	74	ne.	2	4	29.96	29.88	0.00	
30.....	29.89	70	67.5	85	70	68.7	78	s-ne.	1-0	4-6	29.96	29.88	0.01	
Sums.....	1.55
Means.....	29.941	74.9	85.3	73.7	66.8	67.2	2.6	3.8	29.998	29.913
Departure.....	-.016	+0.6	-1.2	-0.2	-0.50

Mean temperature for September, 1900 (6 + 2 + 9) + 3 = 78.4; normal is 77.5. Mean pressure for September (9 + 3) + 2 = 29.953; normal is 29.969.
*This pressure is as recorded at 1 p. m., Greenwich time. †These temperatures are observed at 6 a. m., local, or 4:31 p. m., Greenwich time. ‡These values are the means of (6 + 9 + 2 + 9) + 4. § Beaufort scale.

METEOROLOGICAL OBSERVATIONS AT EAGLE, ALASKA.

Summarized by Prof. ALFRED J. HENRY.

In a previous REVIEW (Vol. XXVII, p. 59) it was stated that the central station of the Alaska climate and crop service would be transferred from Sitka to Eagle, and that Mr. U. G. Myers, a trained observer of the Weather Bureau, would be placed in charge.

Mr. Myers succeeded in opening a station at Eagle, latitude

64° 46' N., longitude 141° 12' W., about the middle of August, 1899. Observations were begun at once and have been continued uninterruptedly ever since.

The equipment of the station is similar to that of any first-class station of the Bureau, viz, two mercurial barometers, two dry thermometers, two self-registering maximum and minimum thermometers, soil thermometer, whirling psychrometer, thermograph, barograph, and wind velocity register. Three observations are made daily, viz, at 8 a. m., 3 p. m., and 8 p. m., mean local time, respectively. The 8 o'clock observations only have been summarized and the results are given in the table below. The pressure is corrected for temperature, instrumental error, and reduced to standard gravity. The elevation of the barometer above sea level is approximately 573 feet.

The lowest temperature observed during the year was 68° below zero in January, 1900. The average temperature for that month was 25° below zero. The temperature fell to 32° or below in every month of the year, and zero temperatures were recorded in seven of the twelve months.

The maximum temperature of the year was 87° in June; the minimum for the same month was 28°, thus giving a monthly range of 59°. The monthly range in January was

91°, viz, from a maximum of 23° above zero, to a minimum of 68° below. The warmest month was July, with a mean temperature of 57°, a mean maximum of 72°, and a mean minimum of 42°. The lowest temperature recorded in July was 31°.

The total precipitation was 10.17 inches, about what would be anticipated for the interior of Alaska. The greatest rainfall in any twenty-four hours was 0.75 inch in August. Showers were rather frequent during the warm months.

High wind velocities were not experienced at any time.

The highest 5-minute velocity was but 32 miles per hour from the east. At no time during the year did the wind approach a gale.

Nearly 50 per cent of the winds were from an easterly quarter, although a relatively large number of west and north-west winds were also observed; in fact, about 70 per cent of the winds were either from the east-southeast or west-northwest. The valley of the Yukon, at Eagle, extends in an east-southeast west-northwest direction, and this fact may partly account for the predominance of east-southeast and west-northwest winds.

Three thunderstorms occurred, one each in May, June, and July.

Meteorological observations at Eagle, Alaska.

(Latitude, 64° 46' N.; Longitude, 141° 12' W. Height of barometer above sea level, 573 feet. Height of thermometer above ground, 6 feet; rain gage, 3 feet; anemometer cups, 26 feet.

Month.	Pressure.			Temperature.							Moisture.										
	Monthly mean.	Extremes.		Mean.					Extremes.		Dew-point.	Relative humidity.	Vapor pressure.		Precipitation.	Cloudiness.					
		Maximum.	Minimum.	8 a. m.	8 p. m.	Maximum.	Minimum.	Monthly.	Maximum.	Minimum.			8 a. m.	8 p. m.	8 a. m.	8 p. m.	Total.	Maximum in 24 hours.	8 a. m.	8 p. m.	Daylight.
1899.	<i>Inches.</i>	<i>Inches.</i>	<i>Inches.</i>	°	°	°	°	°	°	°	°	°	%	%	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>	<i>Ins.</i>			
September	28.86	29.39	28.38	41.2	41.1	52.1	30.0	41.0	66	— 8	34	33	76	74	.197	.194	.039	.011	7.7	7.4	7.7
October	28.88	29.64	28.07	19.9	20.7	28.4	12.4	20.4	41	— 19	15	15	79	79	.085	.090	.065	.035	7.8	6.2	7.4
November	28.75	29.29	28.26	2.4	1.4	8.3	— 5.3	1.2	33	— 25	— 1	— 2	85	88	.042	.040	.052	.027	8.3	5.8	6.4
December	29.02	29.96	28.14	— 19.9	— 17.9	— 11.2	— 26.8	— 19.0	81	— 57	— 22	— 20	93	91	.032	.028	.026	.013	4.4	4.7	4.9
1900.																					
January	29.04	29.64	28.31	— 25.9	— 24.7	— 17.5	— 32.3	— 24.9	23	— 68	— 27	— 26	93	93	.014	.016	.052	.030	4.5	4.5	4.9
February	29.21	29.32	29.36	— 8.1	— 6.3	4.9	— 16.9	— 6.0	18	— 51	— 11	— 10	87	83	.028	.029	.039	.029	5.4	3.6	4.9
March	29.10	29.92	28.67	8.4	13.9	29.2	— 3.1	13.0	56	— 46	4	8	84	78	.074	.088	.002	.001	4.3	3.1	3.6
April	28.73	29.51	28.21	31.6	30.1	42.8	15.3	29.3	54	— 12	21	21	65	69	.114	.116	.042	.024	5.4	5.3	5.9
May	28.80	29.48	28.42	44.7	47.9	56.4	28.0	42.2	69	20	30	32	58	55	.166	.179	.084	.035	5.3	4.8	5.0
June	28.85	29.20	28.27	55.6	58.4	67.3	38.0	52.6	87	28	43	42	64	57	.286	.282	1.57	.048	5.3	6.8	6.2
July	28.91	29.12	28.64	60.1	62.8	72.2	41.6	56.9	81	31	49	49	67	63	.347	.352	1.88	.046	5.1	4.3	5.1
August	28.90	29.33	28.53	50.1	51.1	61.4	36.9	49.2	79	25	43	43	78	75	.284	.282	2.71	.075	7.4	7.5	7.7
Year	28.93	29.52	28.36	21.7	23.2	32.9	9.8	21.3	87	— 68	15	15	77	75	.138	.141	10.17	0.75	5.9	5.3	6.0

Month.	Wind.													Number of days.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
	By self-registers.					Number of winds, 8 a. m. and 8 p. m.								Clear.	Partly cloudy.	Cloudy.	Precipitation.		Snow.	Hail.	Fog.	Maximum temperature.		Minimum temperature below 32°.	Electricity.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
	Average hourly velocity.	Prevailing direction.	Maximum velocity per hour.	Direction at time of maximum velocity.	No. of days with gales 40 miles per hour or over.	North.	Northeast.	East.	Southeast.	South.	Southwest.	West.	Northwest.				Calm.	.01 inch and over.				.04 inch and over.	Below 32°.		Above 32°.	Thunderstorms.	Auroras.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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